



A. JAMES CLARK
SCHOOL OF ENGINEERING

LEARN MORE, *GO FURTHER.*

It's That Simple!

Now is the time to start!

Learn More and Go Further in your career with a graduate engineering degree from one of the top ranked engineering schools in the nation.

The University of Maryland and the Clark School of Engineering have been leaders in distance education for many years and have earned a reputation for offering high quality academic programs around the world.

Contact us now by any of the means listed below to learn more!

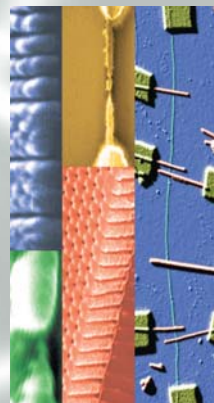
301-405-7200

www.oaee.umd.edu/online.html

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OFFICE OF ADVANCED ENGINEERING EDUCATION

ENERGETIC CONCEPTS



ONLINE

GRADUATE ENGINEERING DEGREES

Professional Master
of Engineering
Program

Graduate Certificate
in Engineering
Program



UNIVERSITY OF
MARYLAND

A. JAMES CLARK
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GO FURTHER:
in combining science and engineering to create energetic materials for protection and safety

Energetics at Maryland is a branch of the physical science of mechanics that deals with energy and its transformations. Energetics research is the underpinning of the development of explosives and propellants.

APPLICANTS

must have at least a bachelor's degree in engineering or a closely related field

REQUIREMENTS

3.0 gpa or better
3 letters of reference
Graduate Record Exam is **NOT** required
TOEFL is required for international students

ONLINE ADVANTAGE

100% Web-based
Online library services
Full Technical Support
Faculty available by emails and chat sessions

DEADLINES

FALL - August 1
SPRING - December 15
SUMMER - May 1

LEARN MORE

WWW.OAEE.UMD.EDU/
ONLINE.HTML

**PROFESSIONAL MASTER
OF ENGINEERING**

REQUIREMENTS

10 COURSES (30 CREDITS)
NO THESIS/RESEARCH
NO COMPREHENSIVE EXAM

**GRADUATE CERTIFICATE
IN ENGINEERING**

REQUIREMENTS

4 CORE COURSES (12 CREDITS)

**CORE COURSES and
TECHNICAL ELECTIVES**

Six courses must be from the Energetics core. Four technical electives may be taken either from the core courses or through other online courses in the Clark School of Engineering (Project Management, Reliability Engineering, or Fire Protection Engineering).

OUR STRENGTHS:

The Center for Energetic Concepts Development is a cooperative research, technology transfer, product development, and science and technology training alliance between the Naval Surface Warfare Center Indian Head Division (IHDIV/NSWC) and The University of Maryland. The master's program was created to provide advanced education to their research staff.



If you work in one of these areas, a degree in energetic concepts may be for you:

Research and development in fundamental energetic materials, functionally graded materials and combustion stability

Design of MEMS and optical fiber based energy interrupter

MEMS packaging, reliability and failure analysis

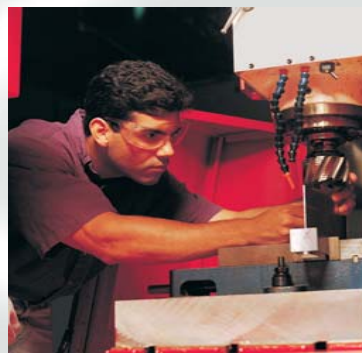
Port safety simulation studies

Development of informatics methodologies for energetic products

Design of microprocessor control units

Multidisciplinary design optimization for underwater warheads

Detonation and shock wave physics



CORE COURSES

Shockwave Physics I
Shockwave Physics II
Materials by Design
Production Manufacturing
Introduction to MEMS
Engineering Decision Making
Emerging Manufacturing Technology
Chemistry of Energetic Materials
Combustion & Reacting Flows
Energetics Project